

*File
CAR-11-1*

U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION
WASHINGTON 25, D. C.

April 17, 1958

FLIGHT OPERATIONS AND AIRWORTHINESS MEMORANDUM NO. 52

TO All Regional Administrators
Director, Office of ~~International~~ Cooperation

FROM : Director, Office of Flight Operations and Airworthiness

SUBJECT: Policy Pertaining to the Issuance of Experimental Certificates;
Supersedes Flight Operations and Airworthiness Memorandum
No. 48 Dated February 14, 1958

Civil Air Regulations 1.73 currently provides for the issuance of experimental certificates for five purposes: (1) amateur-built aircraft, (2) experiment, (3) exhibition, (4) racing, and (5) to show compliance with the Civil Air Regulations. In reviewing the issuance of such certificates in the past, we have determined that closer monitoring is needed in this program area so that flights of experimental aircraft will not be flown indiscriminately throughout the United States. The following are guidelines to follow when authorizing the operation of experimental aircraft.

1. Amateur-built Aircraft. Experimental certificates may be issued for aircraft which can be proved to be amateur-built and are to be operated for educational or recreational purposes. Aircraft which are manufactured as a business or for sale are not considered to be bona fide amateur-built. To be amateur-built, the aircraft need not be designed by the builder, but he must have fabricated and assembled the aircraft (including kits) except for items such as engines, propellers, wheels, brakes, appliances, instruments, fasteners, and hardware.
2. Experiment. We interpret this to cover those operations wherein the applicant desires to conduct exploratory or research flights for the purpose of trying out new aircraft design concepts, new aircraft equipment, new aircraft installations, new aircraft operating techniques, or new uses for aircraft. Although such operations may eventually lead to type certification, they are generally conducted to assist the applicant in deciding whether he should develop his idea any further.

All Regional Administrators
Director, Office of International Cooperation

April 17, 1958

3. Exhibition. We interpret this to mean the public display of aircraft at air shows, meets, fairs, and similar gatherings to exhibit to persons on the surface the aircraft's flight capabilities, such as acrobatics or other performance features, or merely to reveal an unusual aircraft in flight; and includes the operation of aircraft used in motion picture productions.
4. Racing. Certificates may be issued in this class to authorize racing of aircraft in races which are officially sanctioned by the Professional Racing Pilot's Association, or the National Aeronautic Association.
5. To Show Compliance with Civil Air Regulations. Certificates may be issued in this class to new types or modified aircraft for which the Civil Aeronautics Administration has received applications for type certificates or supplemental type certificates.

Aircraft in the above categories originally shall be flown only in flight test areas designated under CAR 60.24 as follows:

At least 10 hours of flight testing must be accomplished and it must be determined that:

- a. The aircraft is controllable throughout its normal range of speeds and performance of maneuvers to be executed.
- b. The aircraft has no hazardous operating characteristics or design features.

After the above has been completed to the satisfaction of the Administration and certified to by the applicant, the aircraft may be authorized to operate outside flight test areas with the following limitations:

- a. Persons or property shall not be carried for compensation or hire.
- b. Occupancy of aircraft is restricted to persons essential to the purpose of the flight or industry and government representatives having a bona fide reason, and who have full knowledge of the limited airworthiness of the aircraft.

All Regional Administrators
Director, Office of International Cooperation

April 17, 1958

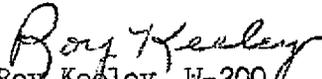
- c. All flights shall be limited to airports, flight areas, and special approach patterns listed herein.
- d. Flight tests (CAR 60.60) shall not be conducted.

In addition to the above limitations, the authorizing office should impose any additional limitations considered necessary.

With reference to item (c) flights shall be planned to involve the least exposure to persons and property on the ground appropriate to the circumstances of the proven integrity of the aircraft and the mission involved. The limitations should be made less restrictive as the CAA's knowledge and evaluation indicates increased airworthiness of the aircraft but in no case should permit the same freedom of operation as is permitted under standard certification.

In the event the application of this policy to a particular situation will result in an undue burden on the operator or is considered unrealistic, the matter should be brought to our attention immediately.

The contents of this memorandum will be incorporated into the appropriate CAM's and MOP's.


Roy Keeley, W-200